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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/071,368	02/08/2002	Ryusuke Hasegawa	H0002699 (4710)	1788	
Stoon & Halay	7590 10/18/2007		EXAM	INER	
1201 New Yor	Staas & Halsy LLP 1201 New York Avenue, N.W.			NGUYEN, TUYEN T	
	Suite 700 Washington, DC 20005		ART UNIT	PAPER NUMBER	
Washington, DC 20003			2832		
			MAIL DATE	DELIVERY MODE	
			10/18/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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	Application No.	Applicant(s)
	10/071,368	HASEGAWA ET AL.
Office Action Summary	Examiner	Art Unit
	TUYEN T. NGUYEN	2832
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	correspondence address
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period was period to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be time will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).
Status		
1) Responsive to communication(s) filed on 03 Ju	ıly 2007.	
2a)⊠ This action is <b>FINAL</b> . 2b)□ This	action is non-final.	
3) Since this application is in condition for allowar		
closed in accordance with the practice under E	x parte Quayle, 1935 C.D. 11, 45	53 O.G. 213.
Disposition of Claims		
4) Claim(s) <u>1,4,5,7,8 and 11-13</u> is/are pending in	the application.	
4a) Of the above claim(s) is/are withdraw	vn from consideration.	
5) Claim(s) is/are allowed.		_
6)⊠ Claim(s) <u>1,4,5,7,8 and 11-13</u> is/are rejected.		
7) Claim(s) is/are objected to.		
8) Claim(s) are subject to restriction and/o	r election requirement.	
Application Papers		
9) The specification is objected to by the Examine	r.	
10)☐ The drawing(s) filed on is/are: a)☐ acco		
Applicant may not request that any objection to the		
Replacement drawing sheet(s) including the correct		
11)☐ The oath or declaration is objected to by the Ex	aminer. Note the attached Oπice	Action of form PTO-152.
Priority under 35 U.S.C. § 119		
12) Acknowledgment is made of a claim for foreign	priority under 35 U.S.C. § 119(a)	)-(d) or (f).
a) All b) Some * c) None of:		
1. Certified copies of the priority documents		an Na
2. Certified copies of the priority documents		
3. Copies of the certified copies of the prior		eu in this National Stage
application from the International Bureau		ad.
* See the attached detailed Office action for a list	or the certified cobies flot receive	,u.
Attachment(s)		

4) D Notice of

1)		Notice	of F	References	Cited	(PTO-892)
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2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO/SB/08)

Paper No(s)/Mail Date \_\_\_\_\_.

4) 🔲	Interview Summary (PTO-413)
	Panar Na/a\/Mail Data

Paper No(s)/Mail Date. \_\_\_\_\_.

5) Notice of Informal Patent Application

6) 📙	] Other:	
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### **DETAILED ACTION**

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 4-5, 7-8 and 11-13, are rejected under 35 U.S.C. 103(a) as being unpatentable over applicant's admitted prior art in view of Nakagawa et al. [JP 06-151143].

AAPA discloses a bandpass filter having an inductor including a non-gapped core.

AAPA discloses the instant claimed invention except for the specific of the magnetic core.

Nakagawa et al. discloses discloses a magnetic core that consists essentially of an Fe-base amorphous metal alloy ribbon and has a *substantially constant* permeability over a frequency range about 1 to 1000kHz. Nakagawa et al. further discloses the core having a permeability in a range of 400 to 1000 over a frequency range of 1 to 1000kHz [figure 2]. Nakagawa et al. inherently discloses a linear B-H loop of the device and the *substantially constant permeability* exists for a field strength range approximately –15 to +15 Oe.

It would have been obvious to one having ordinary skilled in the art at the time the invention was made to use the magnetic core of Nakagawa et al. in AAPA for the purpose of improving magnetic characteristics.

# Response to Arguments

Applicant's arguments filed 7/3/2007 have been fully considered but they are not persuasive.

Applicant argues that:

- [1] Nakagawa product intended for use in a switching power supply which is totally different product than a product intended for use in a bandpass filter of the present invention.
  - [2] Nakagawa core does not give low [including zero] resonance frequency shifts.
- [3] Applicant acknowledges that Nakagawa discloses a constand permeability but in a very small range of  $\pm 2mOe$ .
- [4] AAPA in view of Nakagawa fail to disclose a linear BH loop with a constant permeability at near zero field over a field strength range of approximately -15 to +15 Oersteds (Oe).

The examiner disagrees.

Regarding [1], AAPA discloses a core for a bandpass filter. Nakagawa discloses a magnetic core for a magnetic device. A skilled artisan would have been motivated to seek in magnetic field art for the magnetic core having a constant permeability over a frequency range.

Regarding [2], applicant has not claimed, nor has examiner considered, any core giving low [including zero] resonance frequency shifts.

Regarding [3], Nakagawa discloses, in table 1, the field strength ranging from 0.8 to 14.0 Oe.

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Regarding [4], AAPA discloses a linear BH loop with a constant permeability at near zero field over a field strength range of approximately -10 to +10 Oe [figure 3 of present invention]. Nakagawa discloses, in table 1, a field strength ranging from 0.8 to 14.0.

### Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TUYEN T. NGUYEN whose telephone number is 571-272-1996. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, ELVIN ENAD can be reached on 571-272-1990. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TN TN

TUYEN T. NGUYEN
Primary Examiner
Technology Center 2800

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